

Polaroid P500 Lithium Power Pack

6-Volt Battery

Preliminary Technical Data Sheet

The Polaroid P500 Lithium Power Pack is a further technical advance of Polaroid's planar battery technology. Dimensionally identical to the Polaroid P100 Battery, the 6-Volt Lithium Power Pack features high energy density, high capacity, a flat discharge profile, and an anticipated shelf life of over 5 years. The P500 is thin and flat. Its unique construction prevents explosive rupture. Both contacts are on the same side, preventing damage or failure by incorrect insertion.

Typical Technical Characteristics

Voltage: 6 volts nominal, 6.3 volts typical open circuit voltage.

Typical Operation: Up to 150mA continuous drain.

Size (maximum dimensions):
3.730 in. x 3.040 in. x 0.180 in.
(9.474 cm x 7.722 cm x 0.457 cm)

Weight: 1.2 oz. (34 gms.)

Volume: 1.85 in.³ (30.2 cm³)

Chemistry: Lithium and manganese dioxide are the reactive species.

Recommended Storage: Under 80°F (27°C). Lower temperature storage increases shelf life. Higher temperature decreases shelf life.

Continuous Discharge:

150mA :	6.5 Hours :	975 mAh
100mA :	12.8 Hours :	1280 mAh
50mA :	26.4 Hours :	1320 mAh
20mA :	69.0 Hours :	1380 mAh
10mA :	144.0 Hours :	1440 mAh
5mA :	295.0 Hours :	1475 mAh

Leak Resistant: Unique hermetic seal.

Not Rechargeable: Primary cell: designed for non-rechargeable applications.

Discharge Curve: Essentially flat.

Anticipated Shelf Life: Over five years.

Safety: The P500 Lithium Power Pack has been tested in simulations of normal use, misuse, and a variety of disposal methods. The battery was tested for leaks of hazardous or corrosive materials; it was cut into pieces and immersed in water without explosion or fire. All the tests indicate that, when used as directed, the P500 is as safe as other consumer batteries. Some precautions are naturally necessary. The P500 is not designed to be recharged or used in series. If in your design it is possible that external current may be applied to the battery, or if more than six volts is necessary, call Polaroid for technical assistance. Severely overheating or forcing current through the battery can cause it to swell and ultimately vent a flammable vapor, but not explode. Cutting open the battery will release a small amount of the above vapor. As with any battery, the cautions listed on the package should be followed. The P500 package will read: "**WARNING:** This battery contains flammable materials. Placing it on a very hot surface or recharging could cause it to burst into flame. Do not cut, open, apply heat, burn, recharge, or use in series. Use only in devices designed for a P-500 battery."

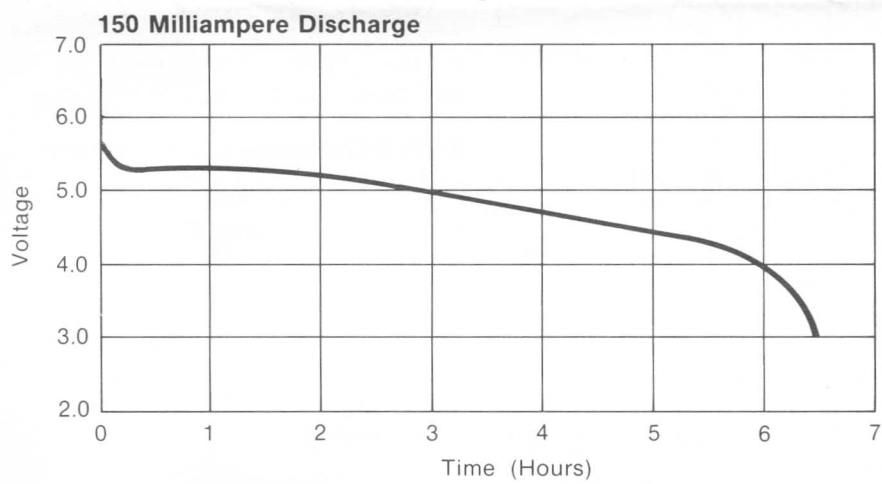
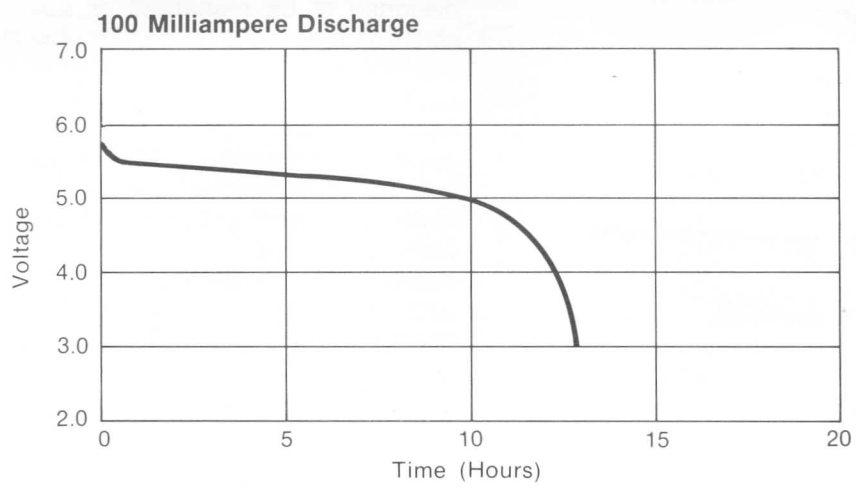
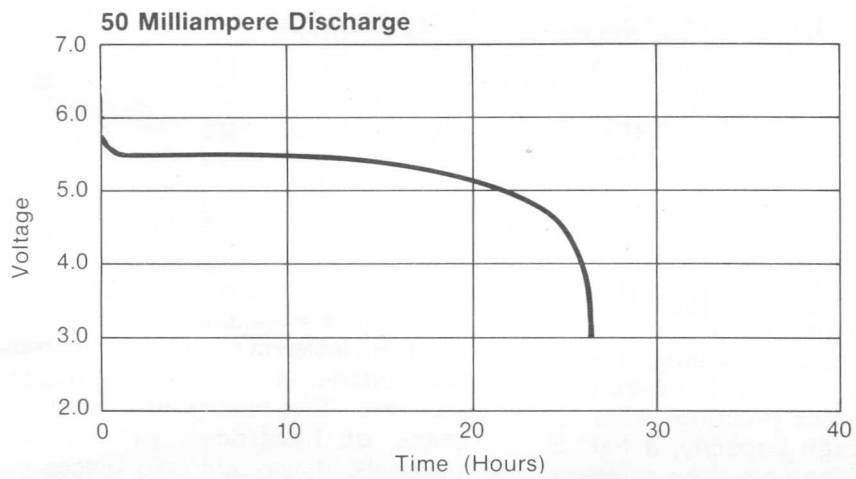
Design Assistance

Polaroid application engineers can assist you in determining the suitability of the Lithium Power Pack for your particular application.

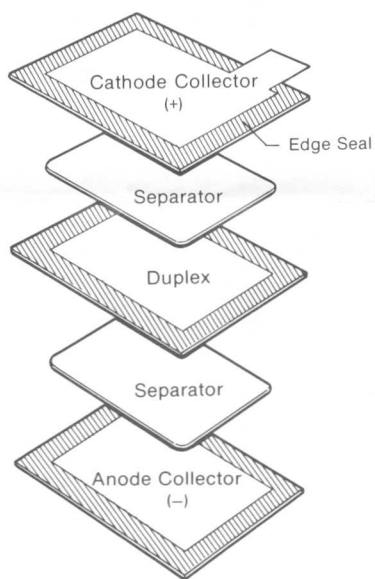
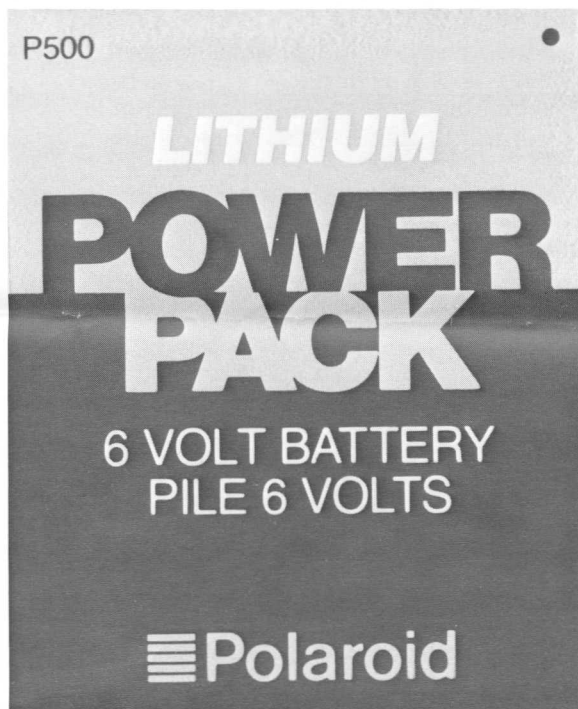
More Information, Prices, Delivery

For more information on technical data, design assistance, prices and delivery, write or call:

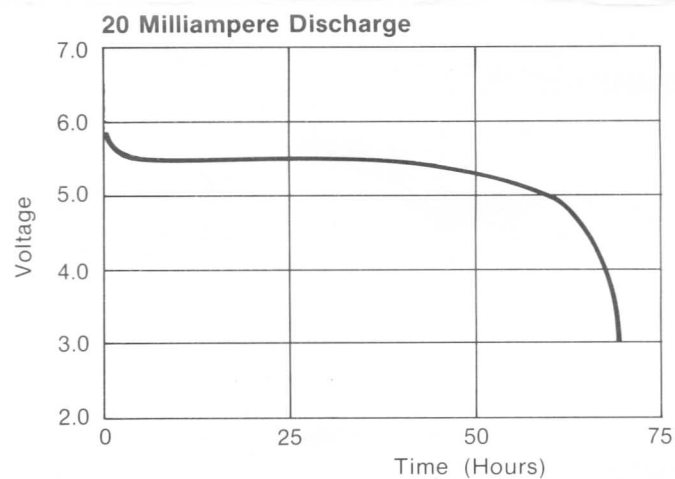
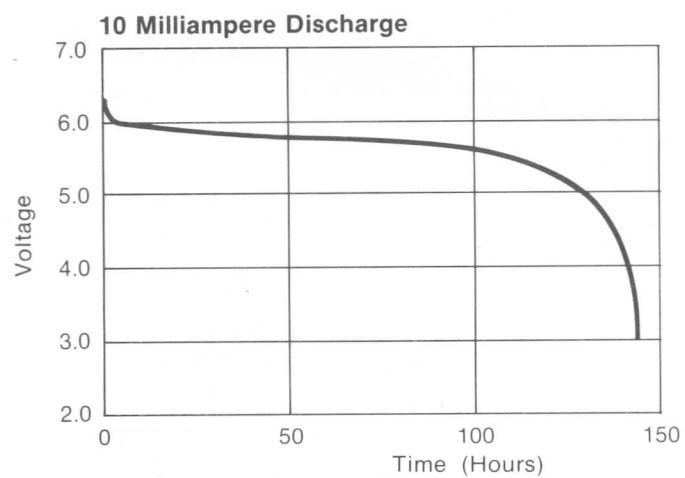
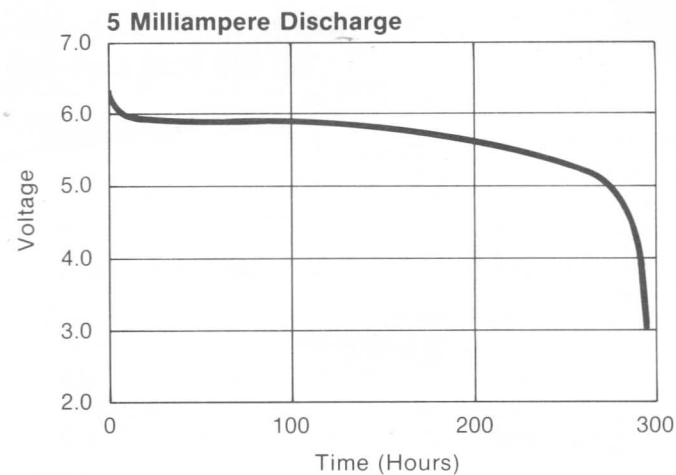
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Performance characteristics.
Constant current, continuous
drain.



"Polaroid"®
P500 Lithium Power Pack



Milliampere-Hours vs. Discharge Current To 3.0 Volt Cut-Off

